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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,754	12/08/2003	Masahiko Ibamoto	056208.53058US	9381

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EXAMINER

LE, DAVID D

ART UNIT PAPER NUMBER

3681

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/728,754		IBAMOTO ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	David D. Le		3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-27 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,9-17,19 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,8,18,20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This is the second Office action on the merits of Application No. 10/728,754, filed on 08 December 2003. Claims 1-5 and 7-27 are pending.

#### **Documents**

2. The following documents have been received and filed as part of the patent application:
- Information Disclosure Statement, received on 12/08/03
  - Foreign Priority Document, received on 12/08/03
  - Information Disclosure Statement, received on 05/14/04
  - Declaration Under 37 C.F.R. 1.132, received on 10/28/05

#### ***Claim Objections***

3. Claims 1, 5, 7, 18, and 20 are objected to because of the following informalities:
- Claim 1, line 8, “each driven gear train” should be amended as --each gear--;
  - Claim 5, lines 14-15, “the the first input shaft” should be amended as --the first input shaft--;
  - Claim 7, line 1, “(original)” should be amended as --(currently amended)--;
  - Claim 18, line 11, “each driven gear train” should be amended as --each gear--;
  - and
  - Claim 20, line 8, “each driven gear train” should be amended as --each gear--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1, 4, 5, 7, 8, 18, 20, and 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**Claim 1:**

- Lines 10-11 recite, in part, the limitation “a motor for generating torque, *fixedly connected* to the first input shaft and the second input shaft via gears...” This limitation appears to be inaccurate because, as disclosed in Fig. 2, motor (5) is operatively connected to the first input shaft (11) and the second input shaft (25) via gears.

**Claim 5:**

- Line 10 recites the limitation "the rotational speed". There is insufficient antecedent basis for this limitation in the claim; and
- Lines 14 and 15 recite the limitation “its second gear”. It is unclear what applicant is referring to by “its”.

**Claim 7:**

- Line 10 recites the limitation "the rotational speed". There is insufficient antecedent basis for this limitation in the claim.

Claim 8:

- Line 10 recites the limitation "the rotational speed of said first input shaft". There is insufficient antecedent basis for this limitation in the claim;
- Lines 10-11 recites the limitation "the rotational speed of said second gear". There is insufficient antecedent basis for this limitation in the claim; and
- Lines 14-16 recite the limitation "the rotational speed of the first input shaft is set closer to that of a second gear of the first transmission gear train to stop transmission". It is unclear what applicant is referring to by this claimed recitation.

Claim 18:

- Lines 13-14 recite, in part, the limitation "a motor for generating torque, *fixedly connected* to the first input shaft and the second input shaft via gears..." This limitation appears to be inaccurate because, as disclosed in Fig. 2, motor (5) is operatively connected to the first input shaft (11) and the second input shaft (25) via gears.
- Line 25 recites the limitation "the rotational speed". There is insufficient antecedent basis for this limitation in the claim; and
- Line 32 recites the limitation "the second transmission gear". It is unclear whether applicant is referring to the second transmission gear of the first transmission gear train or the second transmission gear of the second transmission gear train.

Claim 20:

- Lines 10-11 recite, in part, the limitation “a motor for generating torque, *fixedly connected* to the first input shaft and the second input shaft via gears...” This limitation appears to be inaccurate because, as disclosed in Fig. 2, motor (5) is operatively connected to the first input shaft (11) and the second input shaft (25) via gears.
- Line 20 recites the limitation "the rotational speed". There is insufficient antecedent basis for this limitation in the claim; and
- Line 27 recites the limitation “the second transmission gear”. It is unclear whether applicant is referring to the second transmission gear of the first transmission gear train or the second transmission gear of the second transmission gear train.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/26559.**

**Note:**

To facilitate a better understanding as well as greater accuracy in explaining the following claim rejections, the examiner will refer to the equivalent English version of the WO 00/26559, U. S. Patent 6,712,734 to Loeffler.

**Claim 1:**

Loeffler (i.e., Figs. 1 and 2; column 1, line 66 – column 6, line 47) discloses a multi-speed transmission comprising:

- An engine, (i.e., Fig. 2, element 11);
- A gear-type transmission (i.e., Fig. 2, element 10a);
- A first input shaft (i.e., Fig. 1, being one of element 12 and element 13);
- A second input shaft (i.e., Fig. 1, being the other one of element 12 and element 13);
- An output shaft (i.e., Fig. 1, element 25);
- A plural numbers of gear trains provided between said first input shaft and said output shaft and between said second input shaft and said output shaft (Fig. 2);
- A motor (i.e., Fig. 2, element 40) for generating torque, operatively connected to the first input shaft and the second input shaft via gears (i.e., Fig. 2, elements 41, 42, and 43), whereby the torque is transferred between said first input shaft and second input shaft (i.e., Fig. 2); and
- A control unit (i.e., column 2, lines 47-50) for controlling the torque and rotational speed of said motor and connection/disconnection of said gear trains.

***Allowable Subject Matter***

8. Claims 18 and 20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
9. Claims 4, 5, 7, 8, and 22-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

10. Applicant's arguments filed on 28 October 2005, with respect to claim 1, have been fully considered but they are not persuasive.

Applicant argues that Loeffler reference discloses one or two electric motors releasably coupleable to shafts via clutches 29 and 30, as shown in Loeffler Figs. 1 and 2; therefore, it fails to disclose or suggest the present invention's elimination of such clutches.

Examiner respectfully disagrees with the above argument for the reasons as follows:

- First, the argument does not accurately reflect the scope of the claimed invention as presently recited in claim 1; and
- Second, the above argument does not accurately reflect the examiner's position, as set forth in paragraph 7 above.

Accordingly, as set forth in paragraph 7 above, Loeffler reference meets the claimed limitations.



***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

  
**CHARLES A. MARMOR**  
SUPERVISORY PATENT EXAMINER  
ART UNIT 3681